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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/619,219	07/19/2000	Steven R. Bard	INTL-0417-US (P9042)	1192

7590 10/11/2002

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EXAMINER

BARBEE, MANUEL L

ART UNIT	PAPER NUMBER
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2857

DATE MAILED: 10/11/2002

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/619,219

Applicant(s)

BARD, STEVEN R.

Examiner

Manuel L. Barbee

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133)
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Objections

1. Claim 14 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 14 contains the limitation "to request a power class indication from the sink." This language is identical to the language incorporated into claim 11, and it appears claim 14 should have been canceled along with claim 4.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 and 6-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oprescu et al.

With regard to detecting a power sink coupled to a power source, as shown in claims 1 and 11, Oprescu et al teach determining what components are connected to a bus with a power manager at initialization (col. 5, lines 25-42; col. 7, lines 17-54; Figure 1, power manager 50, power line 30, bus 12). With regard to receiving and using power class information to determine whether to supply power to the sink, as shown in claims 1, 11 and 15, Oprescu et al. teach sending the power requirements of all components

attached to the bus to the power manager and determining whether there is enough power to power additional devices (col. 6, lines 27-41; col. 7, line 11 - col. 8, line 65).

Oprescu et al. do not teach requesting a power class indication from the sinks, as shown in claims 1, 11 and 14. The Examiner takes official notice that it is well known to request data from other components on a bus. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the power manager, as taught by Oprescu et al. to include requesting power class information, because then the power manager would control the time when data is received and avoid receiving information from two components simultaneously.

With regard to coupling a plurality of power sinks to the power source, as shown in claims 2 and 12, Oprescu et al. teach coupling more than one power sink to the bus (col. 5, lines 1-15). With regard to receiving a self-identifier packet at the source from the sink, as shown in claims 3 and 13, Oprescu teaches sending identifying information from all components connected to the bus to the power manager at initialization and sending identifying information and state information when power is requested (col. 7, lines 18-33; Figure 2, step 100).

With regard to determining the available power of the source, as shown in claims 6 and 16, Oprescu et al. teach finding the sum of power being used and determining the surplus power (col. 8, lines 1-19; Figure 2, step 104). With regard to determining whether to supply power, as shown in claims 7 and 17, Oprescu et al. teach comparing the surplus power with the power requirements of an additional component to determine whether to supply power to the component (col. 8, lines 20-65). With regard to

supplying power for enumeration to the sink whether the source is able supply power to the sink or not, as shown in claims 8, 9, 18 and 19, Oprescu teaches initializing all components in a local database at startup (col. 7, lines 34-54). With regard to sending an identifier to the source to determine whether the source can supply power to the sink, as shown in claims 10 and 20, Oprescu teaches sending identifying information and using this to look up power requirements of components on the bus (col. 7, lines 18-33, 55-67).

With regard to a connection to a power source, a plurality of ports to couple power consuming devices, and a processor-based device to determine whether to supply power to the devices based on power class information, as shown in claims 21 and 24, Oprescu et al. teach a power line and a power manager both connected to a bus that is connected to power consuming devices (; col. 7, lines 11-17; col. 8, lines 25-42; Figure 1, power manager 50; bus 12, power line 30; col. 5, lines 1-52). With regard to a fan out physical layer, as shown in claim 22, Oprescu et al. teach a fan out physical layer; col. 9, lines 34-55; Figure 3). With regard to an AC adapter, as shown in claim 23, Oprescu et al. teach an AC adapter (col. 4, lines 57-67; Figure 1, AC adapter 34). With regard to providing power for enumeration and then determining whether to provide further power, as shown in claim 25, Oprescu et al. teach identifying all components and adding them to a local database before determining whether to provide power in response to power requests (col. 6, line 27 - col. 7, line 67).

With regard to power consuming circuitry, a processor-based device, and a port connected to receive power from and provide power class information to the power

source, as shown in claim 26, Oprescu teaches power consuming devices connected to a bus and a power manager and determining whether to supply power based on provided power information (col. 7, lines 11-17; col. 8, lines 25-42; Figure 1, power manager 50, power line 30; bus 12; col. 5, lines 1-15; col. 5, line 53 - col. 6, line 4).

With regard to the system being a mobile computer, as shown in claim 27, Oprescu et al. teach that the system could be a portable computer or a laptop (col. 1, lines 34-49).

With regard to a physical layer integrated with a link layer, as shown in claim 28, and a data plug, as shown in claim 29, Oprescu et al. teach a physical layer with a linked layer (col. 9, lines 34-55). With regard to the processor based device generating a self-ID packet that indicates the power needs of the system, as shown in claim 30, Oprescu et al. teach that the power manager receives the power needs of all components attached to the bus at initialization (col. 7, lines 34-67).

Response to Arguments

4. Applicant's arguments filed 27 August 2002 have been fully considered but they are not persuasive.

Applicant states that the alleged rationale to modify Oprescu to request power class information is the result of hindsight reasoning. Oprescu et al. teach a host with a power manager that is connected to a bus (Fig. 1, host 14, bus 28). Other devices are also connected to the bus. While Oprescu et al. do not specify how communication is initiated, Oprescu et al. teaches that communication over the bus may be entirely conventional (col. 7, lines 18-32). Communication must be initiated by one device. Data may be transmitted without request, or one device will make a request for

information from a particular device and the device will respond. The protocol for communication over the bus is a matter of engineering design. However, bus load and arbitration are concerns for bus communication. Tateyama et al. (US Patent No. 6,425,019) teach having a host send a request for information and responding to the request in order to have more versatile and efficient communication (Abstract, col. 1, line 40 col. 3, line 10). Anderson (Firewire System Architecture, Second Edition: IEEE1394) teaches bus communication using a request and response (page 38, par. 1, Figure 3-1). Anderson also teaches automatic configuration for devices connected to the bus including sending power requirements, which would require a request for the power requirement data (page 44, par. 1, page 55, par. 1; page 428, par. 2; page 37, par. 4). Therefore, the prior art supports using a request and receiving a response as a conventional protocol in bus communication.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manuel L. Barbee whose telephone number is 703-308-0979. The examiner can normally be reached on Monday-Thursday from 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on 703-308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-0976.

mlb
October 1, 2002


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800